Amendments to the claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claim 1 (original): Benzopyran derivatives of the general formula

$$R_1$$
 R_1
 R_2
 R_3
 R_4
 R_5

(I)

wherein:

D represents S or O;

 R_1 , R_2 , R_3 and R_4 are independently hydrogen, halogen, C_{1-6} -alkyl, C_{3-8} -cycloalkyl, hydroxy, C_{1-6} -alkoxy, C_{1-6} -alkoxy- C_{1-6} -alkyl, nitro, amino, cyano, cyanomethyl, perhalomethyl, C_{1-6} -monoalkyl- or dialkylamino, sulfamoyl, C_{1-6} -alkylthio, C_{1-6} -alkylsulfinyl, formyl, C_{1-6} -alkylcarbonylamino, R_8 arylsulfinyl, R_8 arylsulfonyl, C_{1-6} -alkoxycarbonyl, C_{1-6} -alkoxycarbonyl, carbamoyl,

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carbamoylmethyl, C_{1-6} -monoalkyl- or dialkylaminocarbonyl, C_{1-6} -monoalkyl- or dialkylaminothiocarbonyl, ureido, C_{1-6} -monoalkyl- or dialkylaminocarbonylamino, thioureido, C_{1-6} -monoalkyl- or dialkylaminothiocarbonylamino, C_{1-6} -monoalkyl- or dialkylaminosulfonyl, carboxy, carboxy- C_{1-6} -alkyl, acyl, R_8 aryl, R_8 aryl- C_{1-6} -alkyl, R_8 aryloxy;

R₅ and R₆ are each independently hydrogen, C₁₋₆-alkyl or, R₅ and R₆ taken together with the carbon atom to which they are attached form a 3- to 6- membered carbocyclic ring;

 R_7 is 2-, 3- or 4-pyridyl optionally mono- or polysubstituted by R_1 or

 R_7 is 2- or 3-thienyl optionally mono- or polysubstituted substituted by R_1 or

 R_7 is phenyl mono- or polysubstituted by R_1 with the exception of R_7 representing C_6H_5 ;

 R_8 is hydrogen, halogen, C_{1-6} -alkyl, C_{3-8} -cycloalkyl, hydroxy, C_{1-6} -alkoxy, nitro, amino, cyano, cyanomethyl, perhalomethyl;

or a salt thereof with a pharmaceutically acceptable acid or base, or any optical isomer or mixture of optical isomers, including a racemic mixture or any polymorphic and tautomeric form.

Claim 2 (previously presented): The benzopyran derivative according to claim 1 wherein D represents S.

Claim 3 (previously presented): The benzopyran derivative according to claim 1 selected from : R/S-4-(3-Chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzopyran,

R/S-6-Chloro-4-(3-chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-4-(4-Chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzopyran,

R/S-6-Chloro-4-(4-chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethy-2*H*-1-benzo-pyran,

R/S-6-Bromo-4-(4-chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-4-(3-Cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(3-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-6-Bromo-4-(3-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-4-(4-Cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(4-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-6-Bromo-4-(4-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(3-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(3-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(4-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(4-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-4-(3-Chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzopyran,

R/S-6-Chloro-4-(3-chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-4-(4-Chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzopyran,

R/S-6-Chloro-4-(4-chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethy-2*H*-1-benzo-pyran,

R/S-6-Bromo-4-(4-chlorophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-4-(3-Cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(3-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-6-Bromo-4-(3-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-4-(4-Cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(4-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-6-Bromo-4-(4-cyanophenylaminothiocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzopyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(3-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(3-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(4-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(4-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(4-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(4-nitrophenylaminothiocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(3-trifluoromethylphenylaminothiocarbonylamino)-2*H*-1-benzopyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(2-methoxyphenylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(2-methoxyphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(3-methoxyphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(3-methoxyphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(3-methoxyphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(4-methoxyphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(4-methoxyphenylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(4-methoxyphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(2-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(2-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(2-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(3-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(3-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(3-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-3,4-Dihydro-2,2-dimethyl-6-fluoro-4-(4-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Chloro-3,4-dihydro-2,2-dimethyl-4-(4-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-6-Bromo-3,4-dihydro-2,2-dimethyl-4-(4-methylphenylaminocarbonylamino)-2*H*-1-benzo-pyran,

R/S-4-(2-Chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(2-chlorophenylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzo-pyran,

R/S-6-Bromo-4-(2-chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzo-pyran,

R/S-4-(3-Chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(3-chlorophenylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzo-pyran,

R/S-6-Bromo-4-(3-chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzo-pyran,

R/S-4-(4-Chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-6-fluoro-2*H*-1-benzo-pyran,

R/S-6-Chloro-4-(4-chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzo-pyran,

R/S-6-Bromo-4-(4-chlorophenylaminocarbonylamino)-3,4-dihydro-2,2-dimethyl-2*H*-1-benzo-pyran.

Claim 4 (canceled).

Claim 5 (currently amended): The pharmaceutical composition comprising a benzopyran

derivative according to claim 1 or pharmaceutically acceptable salt thereof with a

pharmaceutically acceptable acid or base or any optical isomer or mixture of optical isomers,

including a recemic racemic mixture or any tautomeric form together with one or more

pharmaceutically acceptable carriers of diluents.

Claim 6 (canceled).

Claim 7 (previously presented): The pharmaceutical composition according to claim 5 in the

form of an oral dosage unit or parental dosage unit.

Claim 8 (currently amended): The pharmaceutical composition according to claim 5 wherein in

the form of an oral dosage unit or parental dosage unit containing said benzopyran derivative is

administered as a dose in a range from about 0.05 to 1000, preferably from about 0.1 to 500 and

especially in the range from 50 to 200 mg per day.

Claims 9-13 (canceled).

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Claim 14 (previously presented): The method of treating diseases of the endocrinological system, such as hyperinsulinaemia and diabetes in a subject in need thereof comprising administering an effective amount of a benzopyran derivative according to claim 1.

Claim 15 (previously presented): The process for the manufacture of a medicament, particular to be used in the treatment of diseases of the endocrinological system, such as hyperinsulinaemia and diabetes which process comprising bringing a compound of formula (I) according to claim 1 or a pharmaceutically acceptable salt thereof into a galenic dosage form.

Claim 16 (original): A method of preparing a benzopyran derivative of formula (I) which comprises:

- reacting a compound of formula (II)

$$R_2$$
 R_3
 R_4
 R_4

wherein R represents NH₂ and R₁, R₂, R₃ and R₄ are defined as for formula (I) with an isothiocyanante of formula (III)

$$R_7$$
-N=C=D

(III)

wherein D represents S or O and R₇ is defined as for formula (I), to form a benzopyran derivative of formula (I); or

- reacting a compound of formula (II) wherein R represents -N=C=S and R₁, R₂, R₃ and R₄ are defined as for formula (I) with an amine of formula (IV)

 R_7-NH_2

(IV)

wherein R_7 is defined as for formula (I), to form a benzopyran derivative of formula (I).

Claim 17 (new): The pharmaceutical composition according to claim 5 in the form of an oral dosage unit or parental dosage unit containing said benzopyran derivative in a range from about 0.1 to 500.

Claim 18 (new): The pharmaceutical composition according to claim 5 in the form of an oral dosage unit or parental dosage unit containing said benzopyran derivative in a range from about 50 to 200 mg per day.

Claim 19 (new): The method of claim 14 wherein the benzopyran derivative is administered as a dose in a range from about 0.05 to 1000 mg per day.

Claim 20 (new): The method of claim 14 wherein the benzopyran derivative is administered as a dose in a range from about 0.1 to 500 mg per day.

Claim 21 (new): The method of claim 14 wherein the benzopyran derivative is administered as a dose in a range from about 50 to 200 mg per day.